

ABSTRACT

An energy absorbing terminal is described that is made up of a plurality of cells partially defined by cambered panels made of thermoplastic or another suitable material. The panels are supported upon rectangular frames. The cambered portion of the panels provides a predetermined point of flexure for each panel and, thus, allows for energy dissipation during a collision. The stiffness of the crash cushion may be varied by altering material thicknesses and diaphragm spacing. In operation, a vehicle colliding in an end-on manner with the upstream end of the energy absorbing terminal will cause each of the cambered panels to bend angularly at its point of flexure and, thus, cause the cells to collapse axially. The use of thermoplastic, such as polyethylene results in a reversible, self-restoring collapse for the terminal, meaning that the terminal is reusable after most collisions.